



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4090 BYPASS RATIO: 6.1  
 UNIQUE ID NUMBER: 3PW066 PRESSURE RATIO ( $\pi_{00}$ ): 39.2  
 COMBUSTOR:  
 ENGINE TYPE: TF RATED THRUST ( $F_{00}$ ) (kN): 395.0

REGULATORY DATA **\*\* DATA SUPERSEDED \*\* SEE FOLLOWING UID FOR REVISED DATA: 10PW099**

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	3.9	27.5	92.8	9.2
AS % OF ORIGINAL LIMIT	19.9	23.3	78.4	56.6
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			98.0	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			108.8	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			120.1	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			135.6	

DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	3.898	0.03	0.19	61.00	7.1
CLIMB OUT	85	2.2	2.977	0.03	0.23	42.80	3.4
APPROACH	30	4.0	0.957	0.06	0.44	13.19	1.0
IDLE	7	26.0	0.268	2.30	20.63	4.29	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1204	992	8848	31629	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				2.5	22.4	80.1	7.1
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.1-101.6
TEMPERATURE (K)	292.8-302.6
ABS HUMIDITY (kg/kg)	0.0097-0.0112

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	

MANUFACTURER: Pratt & Whitney  
 TEST ORGANIZATION: Pratt & Whitney  
 TEST LOCATION: East Hartford, CT  
 TEST DATES: 15/06/1996-16/06/1996

REMARKS

1. Data from Report PWA-6678

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)